MissingLink
3G·HD·SD

ML-11A

3G/HD/SD-SDI to HDMI Converter

User Manual

Full HD 1080 | WUXGA 1920×1200 | x.v.Color | CAT-5e/6/7 SINGLE PATENTED | 7.1 CH AUDIO | RoHS Compliance | FC | CE

rev: 140123
Made in Taiwan

Safety and Notice

The **ML-11A** **3G/HD/SD-SDI to HDMI Converter** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **ML-11A** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

TABLE OF CONTENTS

INTRODUCTION 1
FEATURES 1
SPECIFICATIONS 2
PACKAGE CONTENTS 3
SUPPORTED RESOLUTIONS 3
PANEL DESCRIPTION 4
CONNECTION DIAGRAM 5
LIMITED WARRANTY 6

INTRODUCTION

The **ML-11A** provides a cost effective way to convert 3G/HD/SD-SDI signal to HDMI compliant format. The conversion between SDI and HDMI is pure digital and guarantees no loss transformation for both audio and video. Plus, with up to 8 channels audio support, 7.1 channel or 5.1 channel audio becomes available. The ML-11A is designed in the most compact size with the inter-lock power and wall-mount ears.

FEATURES

- Supported 3G formats(SMPTE 425M):
  1080p @50/59.94/60Hz (4:2:2)
- Supported high-definition (HD) formats:
  1080i @50/59.94/60Hz
  1080p @23.98/24/25/29.97/30Hz
  720p @50/59.94/60Hz
- Supported standard-definition (SD) formats:
  NTSC @59.94Hz
  PAL @50Hz
- Auto 3G/HD/SD-SDI detection

SPECIFICATIONS

Model Name		ML-11A
Technical		
Role of usage		Digital-to-digital format converter
SDI standards		SD-SDI & HD-SDI & 3G-SDI
Auto HD/SD-SDI detection		Yes
Video bandwidth		2.970Gpbs, 2.970/1.001Gbps
Video support		[3G] 1080p @50/59.94/60Hz (4:2:2) [HD] 720p @50/59.94/60Hz 1080i@50/59.94/60Hz,1080p @23.98/24/25/29.97/30Hz [SD] NTSC @59.94Hz, PAL @50Hz
Input signal		[SD-SDI] SMPTE 259M [HD-SDI] SMPTE 292M, 296M [3G-SDI] SMPTE 424M/425M
Output signal		HDMI
Audio support		7.1/5.1/Stereo PCM only
Eye pattern characteristics		Extra low alignment jitter 0.05UI at HD
Cable equalization		[3G-SDI] up to 60m (200ft) [HD-SDI] up to 150m (500ft) [SD-SDI] up to 300m (1000ft)
Loop-out		N/A
PCB stack-up		6-layer board [impedance control — differential 100Ω; single 50Ω]
Input		1x BNC [SDI]
Output		1x HDMI
BNC connector		3G 75Ω inter-locked socket
HDMI connector		Type A [19-pin female]
Mechanical		
Housing		Metal case
Dimensions [L x W x H]	Model	74 x 74 x 26mm [2.9" x 2.9" x 1.0"]
	Package	140 x 200 x 75mm [5.5" x 7.9" x 3"]
	Carton	420 x 400 x 300mm [1'5" x 1'4" x 11.8"]
Weight	Model	211g [7.4 oz]
	Package	440g [15.4 oz]
Fixedness		USB power supply
Power supply		5V 1A DC
Power consumption		2.5 Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

PACKAGE CONTENTS

- 1x ML-11A
- 1x 5V power adapter

SUPPORTED RESOLUTIONS

3G-SDI Input	
1080p @ 60/59.94/50Hz	SMPTE 425M (4:2:2)
HD-SDI Input	
720p @ 50Hz	SMPTE 296M -3
720p @ 60 / 59.94Hz	SMPTE 296M -1, -2
1080i @ 25Hz	SMPTE 274M -6
1080i @ 30 / 29.97Hz	SMPTE 274M -4, -5
1080p @ 24 / 23.98Hz	SMPTE 274M -10, -11
1080p @ 25Hz	SMPTE 274M -9
1080p @ 30 / 29.97Hz	SMPTE 274M -7, -8
SD-SDI Input	
NTSC	
PAL B,D,G,H,I	

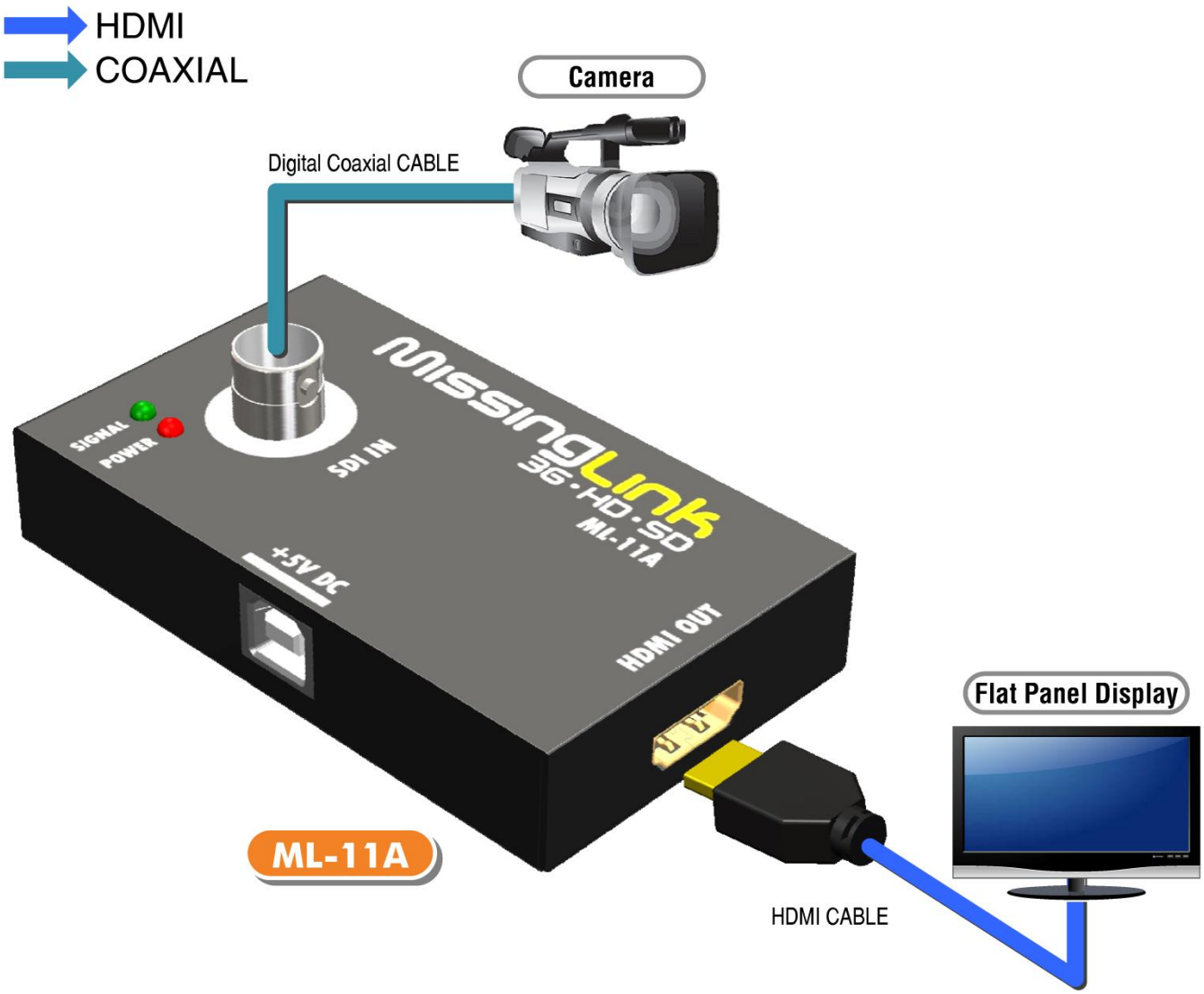
PANEL DESCRIPTION

Front Panel

Rear Panel

3. **+5V DC:** Connect to a 5V DC power supply.
4. **HDMI OUT:** Connect to a HDMI display with a HDMI male-male cable here.
2. **SDI IN:** 3G/HD/SD-SDI Input
1. **Power & Signal:** LED indicator

CONNECTION DIAGRAM



LIMITED WARRANTY

The SELLER warrants the **ML-11A 3G/HD/SD-SDI to HDMI Converter** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, the SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the ML-11A features and specifications is subject to change without further notice.**